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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,537	12/12/2001	Sharad Sambhwani	021202-002000US	3645
20350	7590 10/19/2005		EXAMINER	
	D AND TOWNSEND	MURPHY, RHONDA L		
TWO EMBA	RCADERO CENTER OOR		ART UNIT	PAPER NUMBER
	CISCO, CA 94111-3834	4	2667 .	

Please find below and/or attached an Office communication concerning this application or proceeding.

		A	K
	Application No.	Applicant(s)	
	10/015,537	SAMBHWANI ET AL.	
Office Action Summary	Examiner	Art Unit	
	Rhonda Murphy	2667	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period was realized to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be to will apply and will expire SIX (6) MONTHS from cause the application to become ABANDON6	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on	_•		
•	action is non-final.		
3) Since this application is in condition for alloward closed in accordance with the practice under E			
Disposition of Claims			
4) ☐ Claim(s) 1-23 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-23 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	vn from consideration.	·	
Application Papers			
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 29 March 2002 is/are:  Applicant may not request that any objection to the  Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	a)  accepted or b)  objected drawing(s) be held in abeyance. Se ion is required if the drawing(s) is o	ee 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 6) Other:		

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#### **DETAILED ACTION**

## **Drawings**

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because applicant has submitted informal drawings. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1- 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao et al. (US 2003/0063656) in view of Tsuneki et al. (US 2002/0024942).

Regarding claims 1 and 12, Rao teaches a system for identifying a scrambling code from signals received from a base station, comprising: a scrambling code generator configured to generate a master scrambling code (page 1, paragraphs 4 and 5; PN code sequences are produced by a code generator); control logic configured to generate a plurality of individual scrambling codes based on the master scrambling code (page 1, paragraph 9; page 2, paragraph 22), the plurality of individual scrambling

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codes being sequential and any two adjacent individual scrambling codes having a predetermined chip offset (page 1, paragraph 9; page 2, paragraph 22); and a plurality of correlators configured to perform correlations and generate correlation results (page 4, paragraphs 32-33), each correlator configured to correlate the received signals with a corresponding one of the plurality of individual scrambling codes and generate corresponding correlation results (page 4, paragraphs 32-33).

Although it is well known in the art for correlators to operate in parallel, Rao fails to explicitly disclose the correlators performing their correlations in a parallel manner.

However, Tsuneki discloses parallel correlations (page 2, paragraph 17).

In view of this, it would have been obvious to one skilled in the art to modify Rao's system by incorporating parallel correlators for the purpose of performing correlation simultaneously.

Regarding claims 2 and 13, Rao teaches the above system wherein the correlation results generated by the plurality of correlators are evaluated to identify the scrambling code from the received signals thereby allowing the identity of the base station which transmitted the received signals to be identified (page 2, paragraph 22; thus identifying the scrambling code group in which the base station belongs).

Regarding claims 3 and 16, Rao teaches the system described above in the rejection of claim 1. Rao fails to explicitly disclose the plurality of correlators performing their correlations in a real-time manner.

However, real-time correlation is known in the art for rapid correlation. It would have been obvious to include real-time correlation into Rao's system for the purpose of

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eliminating a buffering step to provide faster correlation.

**Regarding claims 4 and 17**, Rao teaches a mobile terminal incorporating the system as recited in claim 1, (Fig. 1, mobile 106; page 2, paragraph 18).

Regarding claims 5 and 18, Rao teaches a system wherein the base station is located in a W-CDMA communication network (page 2, paragraph 18).

Regarding claim 6, Rao teaches a system for identifying a scrambling code from signals received from a base station, the base station belonging to one of a plurality of base station groups in a communication network (Fig. 1, page 1, paragraphs 4 and 5). Rao further teaches the same limitations described above in the rejection of claim 1). Regarding claim 7, Rao teaches a system wherein the master scrambling code has a period determined by a correlation length and a predetermined group chip offset (page 2, paragraphs 21-22).

**Regarding claim 8**, Rao teaches a system wherein the predetermined group chip offset is determined by number of base stations within a base station group and the predetermined chip offset (page 1, paragraphs 5-6).

**Regarding claim 9**, Rao teaches the same limitations described in the rejection of claim 3.

**Regarding claim 10**, Rao teaches the same limitations described in the rejection of claim 4.

**Regarding claim 11**, Rao teaches the same limitations described in the rejection of claim 5.

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Regarding claim 14, Rao teaches a method wherein the base station belongs to one of a plurality of base station groups in a communication network and the step of generating the master scrambling code further comprises: selecting a correlation length (page 2, paragraphs 21-22); and generating the master scrambling code using the selected correlation length and a predetermined group chip offset (page 2, paragraphs 21-22).

Regarding claim 15, Rao teaches a method wherein the predetermined group chip offset is determined by number of base stations within a base station group and the predetermined chip offset (page 1, paragraphs 5-6).

Regarding claim 19, Rao teaches a system for identifying a scrambling code from signals received from a base station, comprising: means for generating a master scrambling code (page 1, paragraphs 4 and 5; PN code sequences are produced by a code generator); means for generating a plurality of individual scrambling codes, wherein the plurality of individual scrambling codes are sequential and any two adjacent individual scrambling codes are separated by a predetermined chip offset (page 1, paragraph 9; page 2, paragraph 22); and means for correlating the received signals with each of the plurality of individual scrambling codes and generating correlation results therefor (page 4, paragraphs 32-33).

Although it is well known in the art for correlators to operate in parallel, Rao fails to explicitly disclose the correlators performing their correlations in a parallel manner.

However, Tsuneki discloses parallel correlations (page 2, paragraph 17).

In view of this, it would have been obvious to one skilled in the art to modify

Rao's system by incorporating parallel correlators for the purpose of performing

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correlation simultaneously.

Regarding claim 20, Rao teaches a system further comprising: means for evaluating the correlation results to identify the scrambling code from the received signals thereby allowing the identity of the base station which transmitted the received signals to be identified (page 2, paragraph 22; thus identifying the scrambling code group in which the base station belongs).

Regarding claim 21, Rao teaches a system described above in the rejection of claim 19. Rao fails to explicitly disclose the plurality of correlators performing their correlations in a real-time manner.

However, real-time correlation is known in the art for rapid correlation. It would have been obvious to include real-time correlation into Rao's system for the purpose of eliminating a buffering step to provide faster correlation.

Regarding claim 22, Rao teaches a mobile terminal utilizing the system as recited in claim 19 (Fig. 1, mobile 106; page 2, paragraph 18).

Regarding claim 23, Rao teaches a system wherein the base station is located in a W-CDMA communication network (page 2, paragraph 18).

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

\*Lee (US 6,894,996) discloses an apparatus and method for searching a base station in an asynchronous mobile communications system.

\*Zhou et al. (US 2003/0012270) discloses a receiver.

\*Aramaki (US 2002/0041581) discloses a CDMA radio receiving apparatus and cell search method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy

Examiner Art Unit 2667

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TECHNOLOGY CENTER 200 (0/17/5)